

ABSTRACT OF THE DISCLOSURE

A rotating electric machine comprises a stator having stator salient poles, three-phases windings wound around said stator salient poles, a rotor rotatable held inside the said stator, and permanent magnets inserted into said rotor and positioned opposite to said stator salient poles, wherein said three-phase windings are concentratively wound around each of said stator salient poles, said windings of each phase are wound around at more than one stator salient pole, and said windings of each phase have a phase difference of voltage between at least one of the windings and the other.